

[0047] Transmitting systems and methods for multiple access protocols consistent with the present invention include device(s) to increase data rates in at least two portions that generate different access protocols. The increased data rates cause noise generated by Σ - Δ converters in the at least two portions to occupy high frequencies, enabling the at least two portions to share common reconstruction filters. Shifting the noise in such a manner also allows the use of wide bandwidth common reconstruction filters.